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Fire performance of metal-free timber connections

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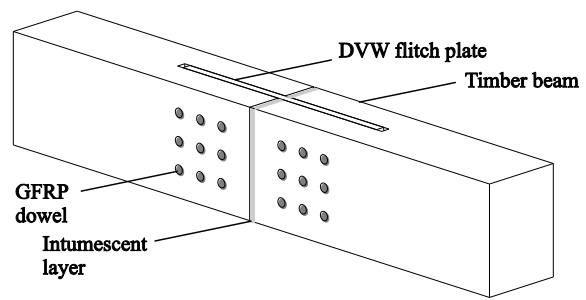


Figure 1: Non-metallic DVW flitch plate connection

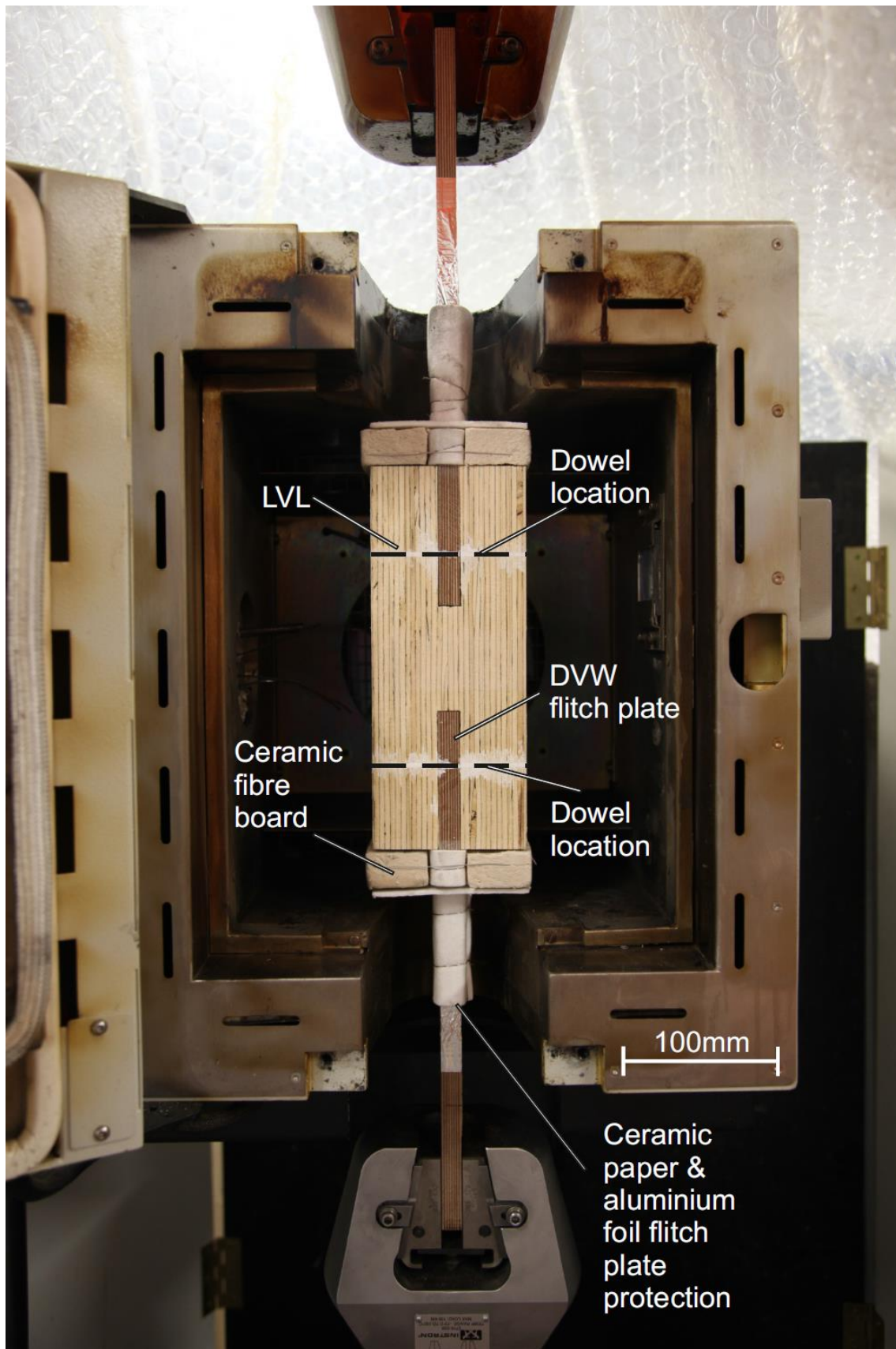


Figure 2: Setup of tensile connection test in an environmental chamber

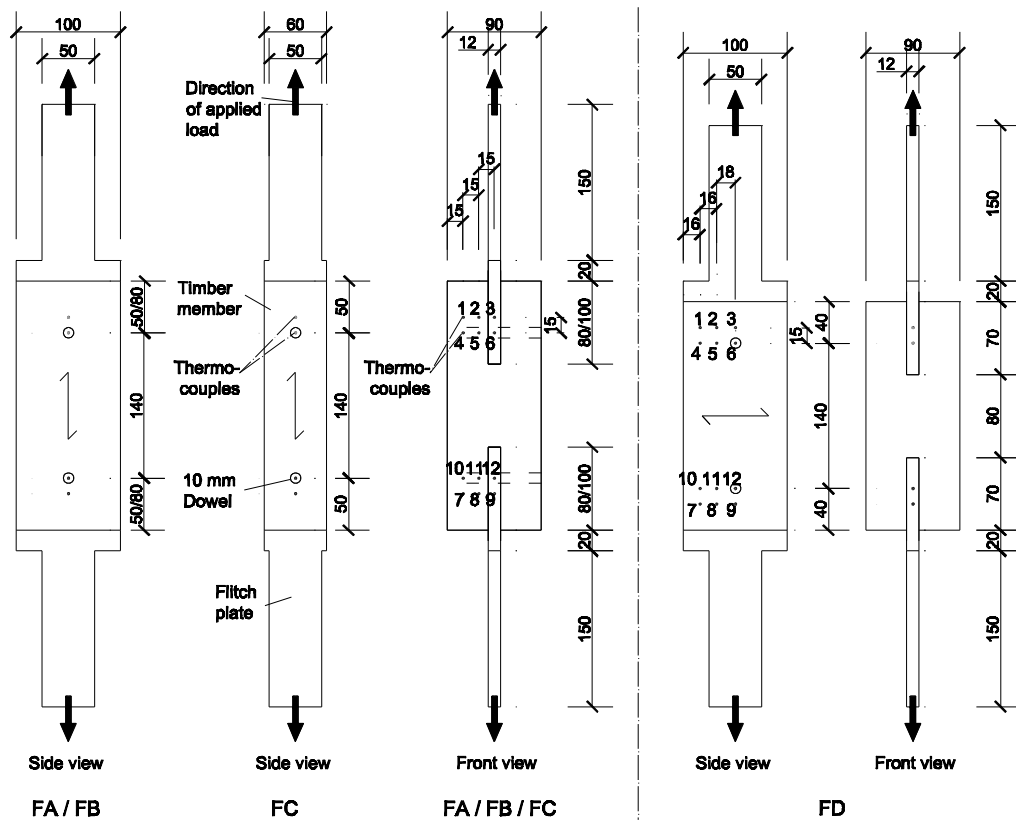


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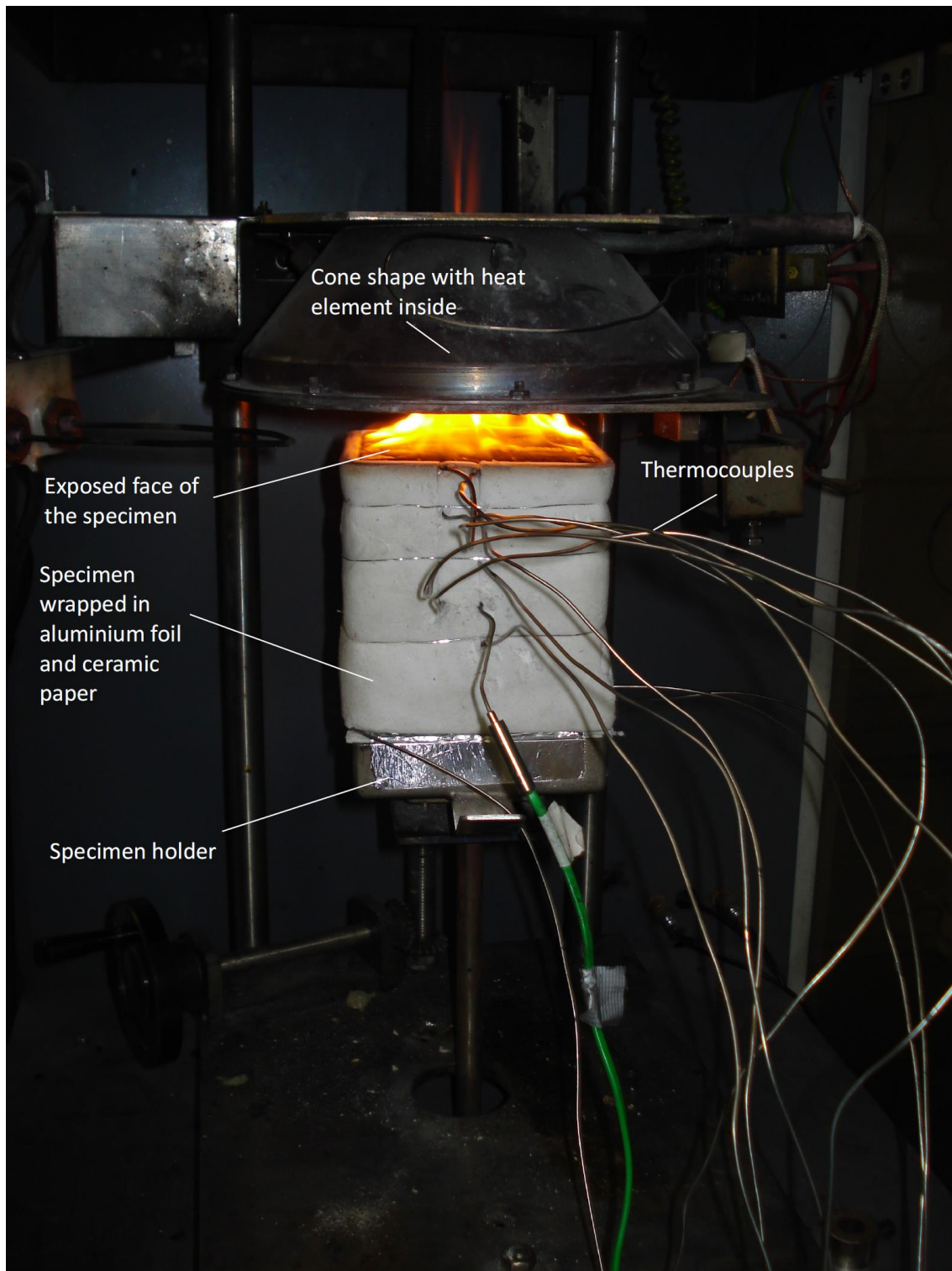


Figure 4: Cone calorimeter test

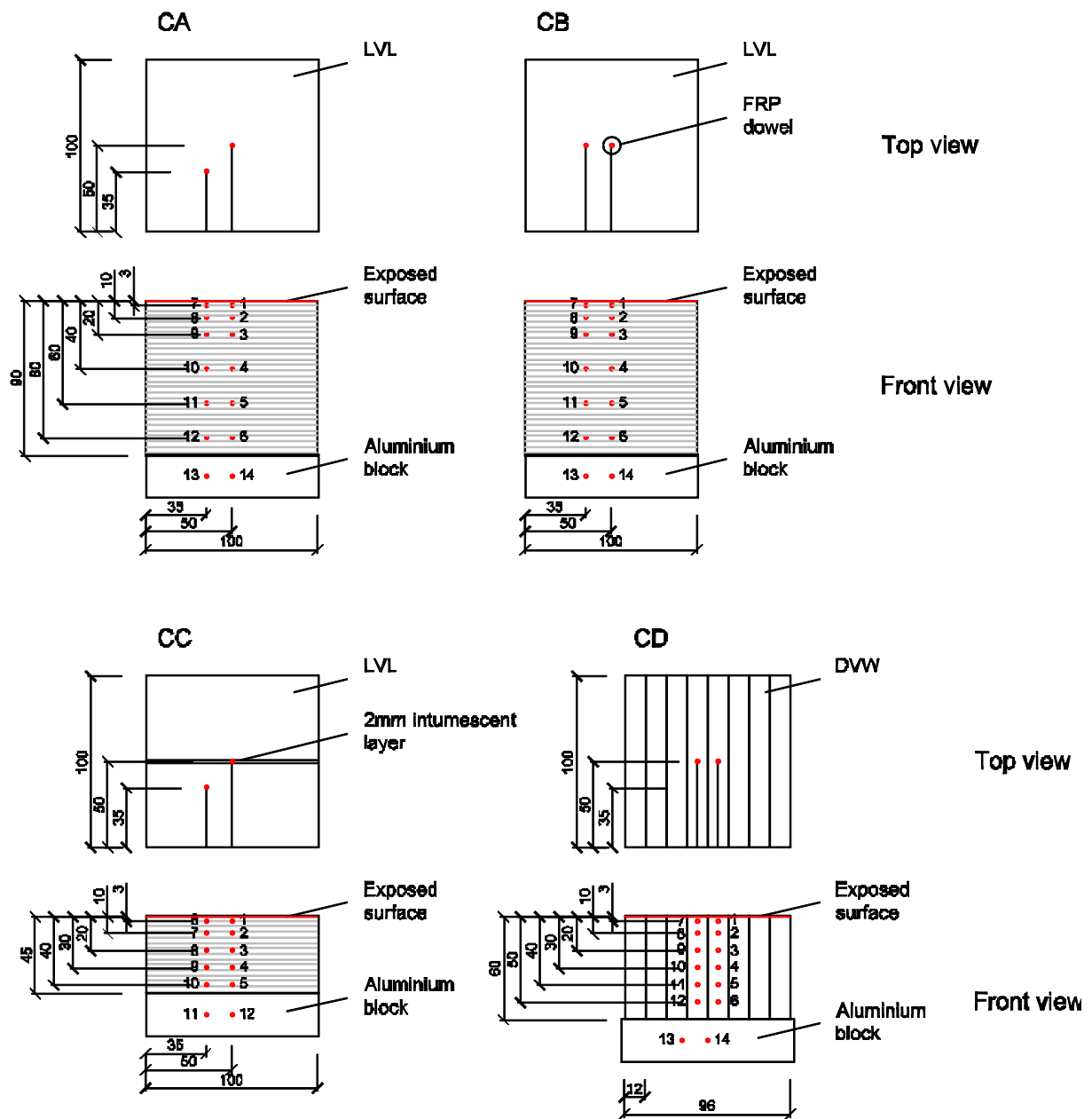


Figure 5: Location of thermocouples in constant heat flux tests (dimensions in mm)

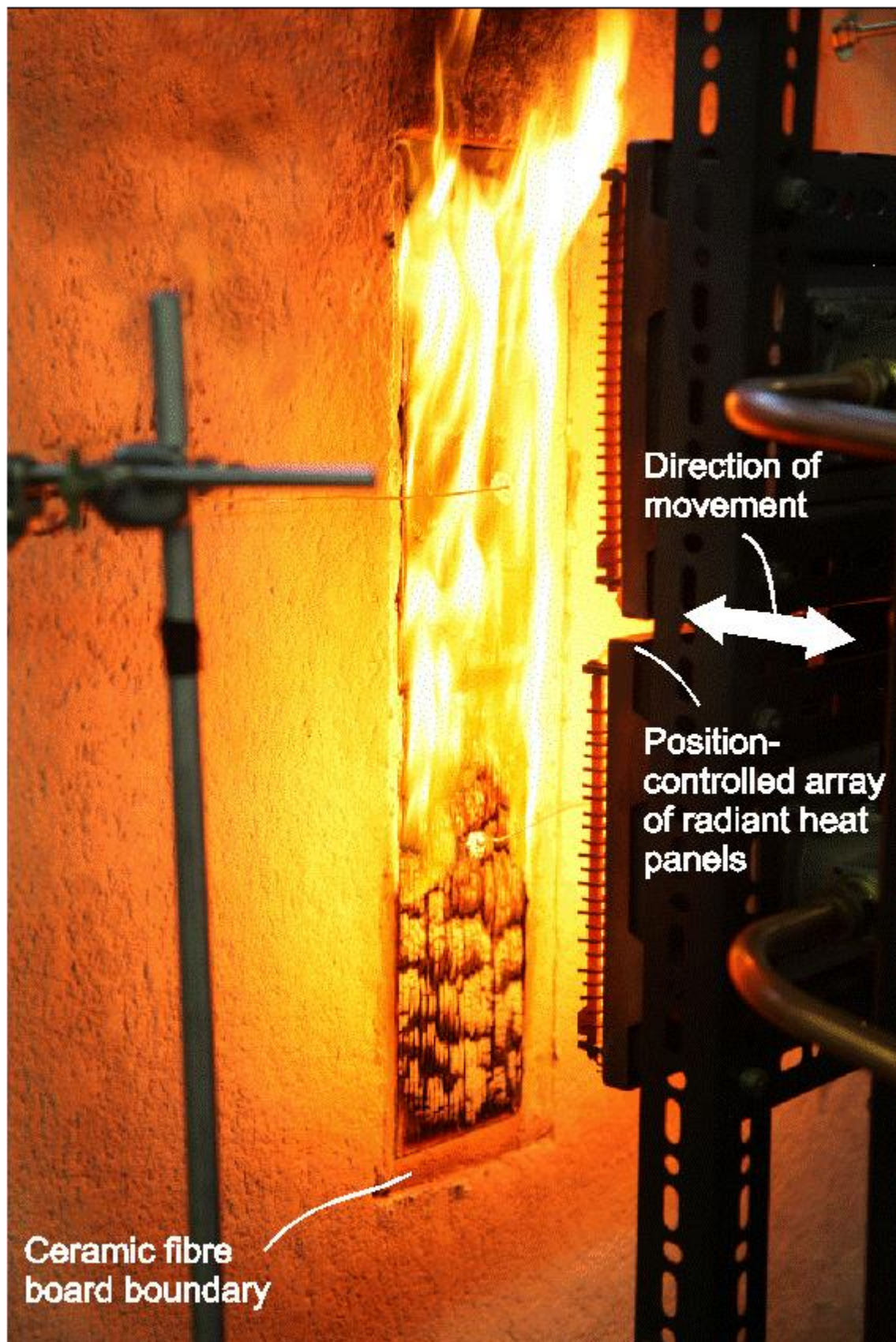


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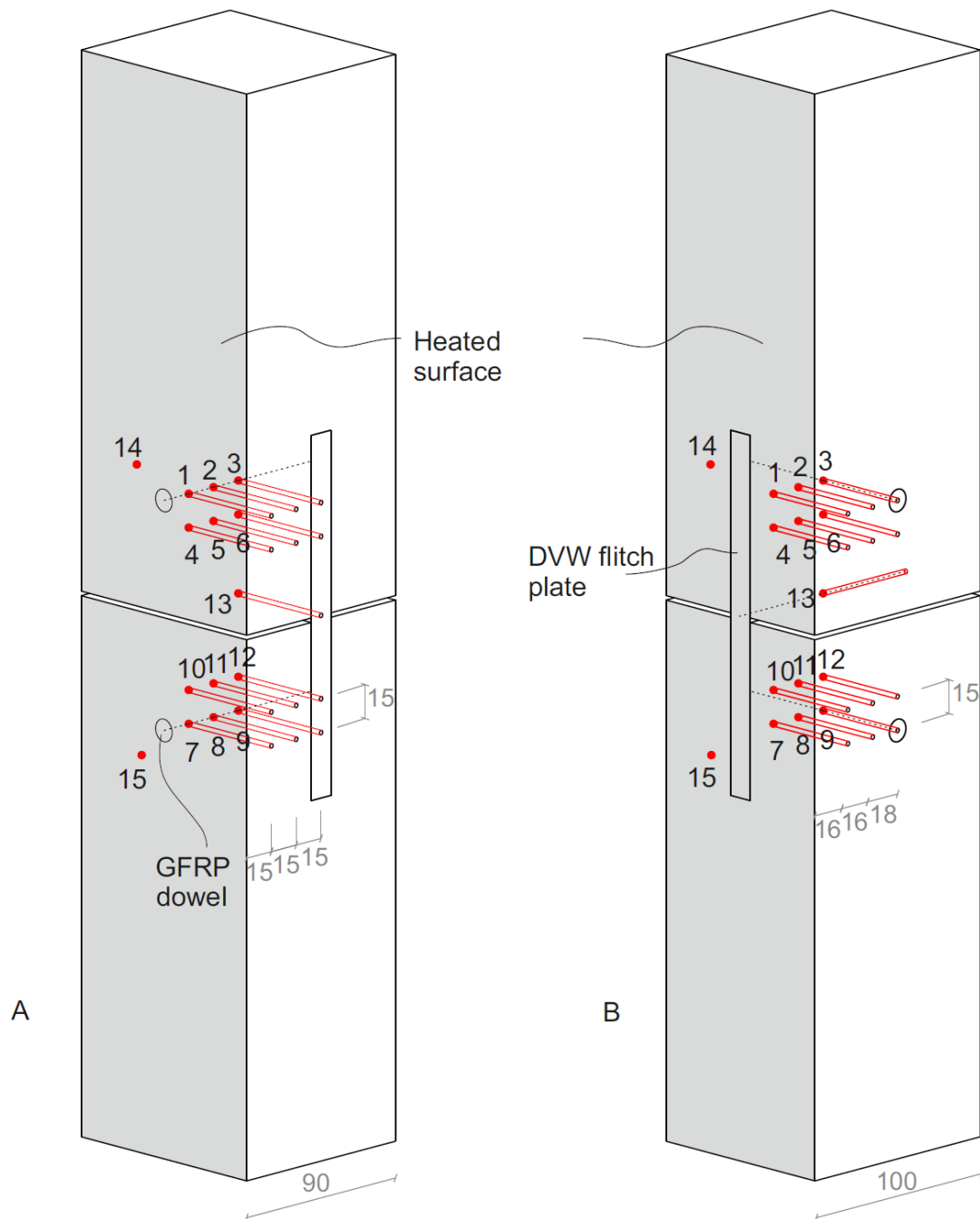


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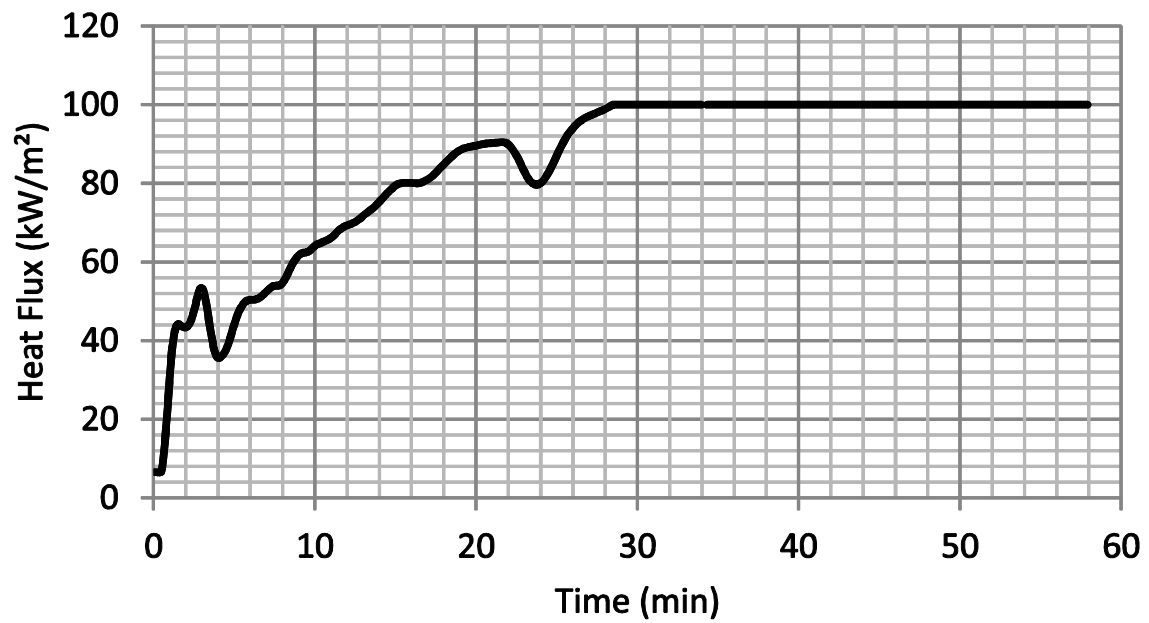


Figure 8: Time-history of incident heat flux imposed using H-TRIS

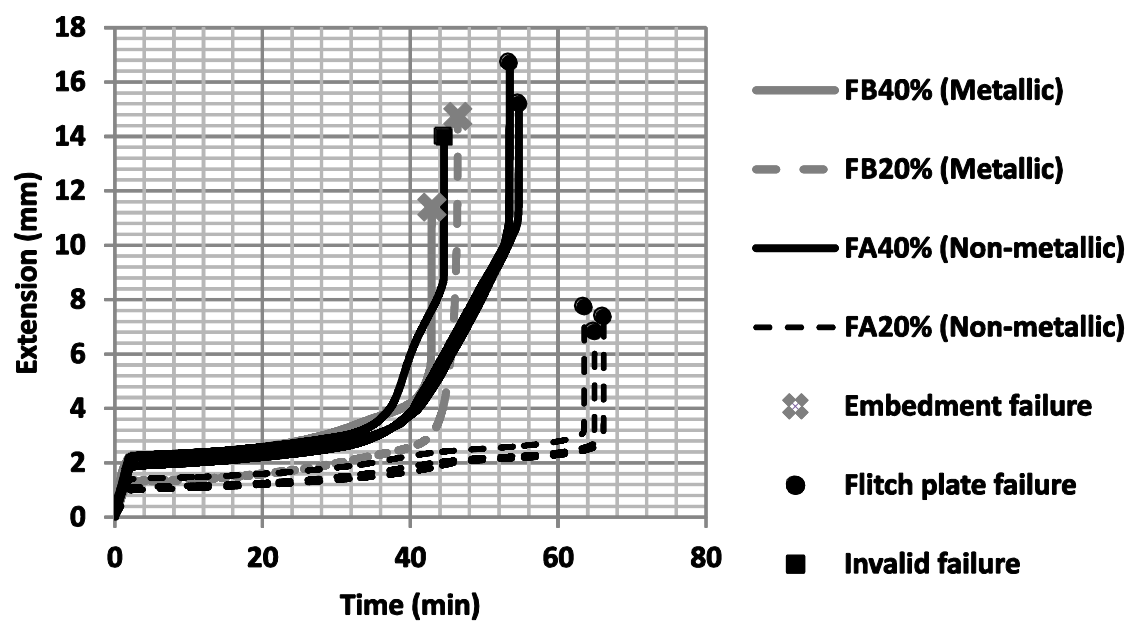


Figure 9: Crosshead displacement versus time of test for Series FA and FB

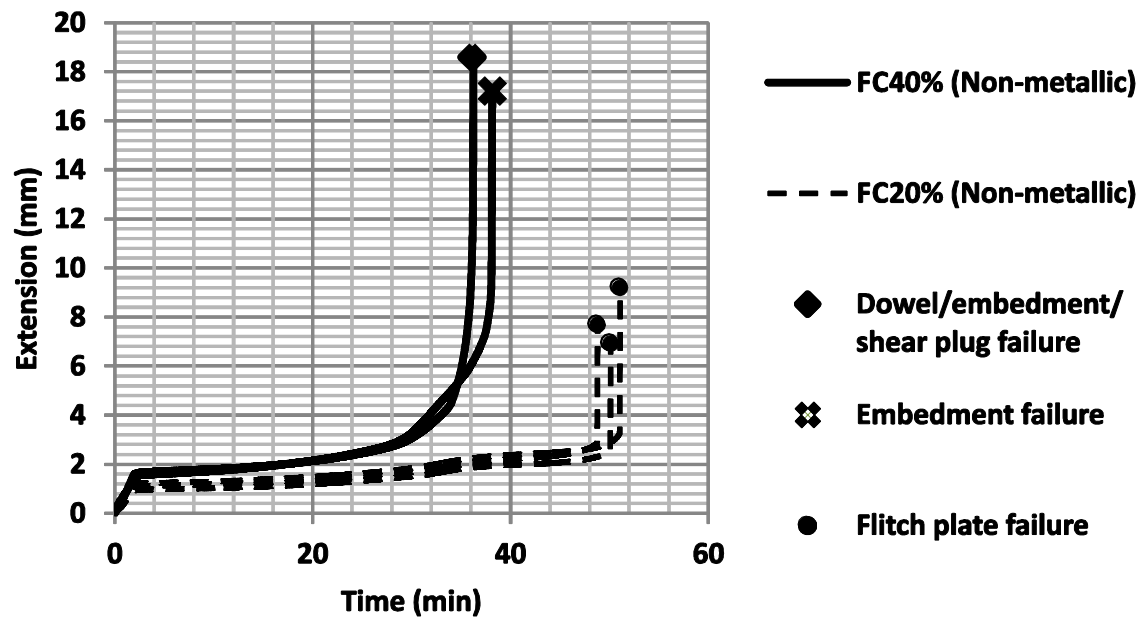


Figure 10: Crosshead displacement versus time of test for Series FC

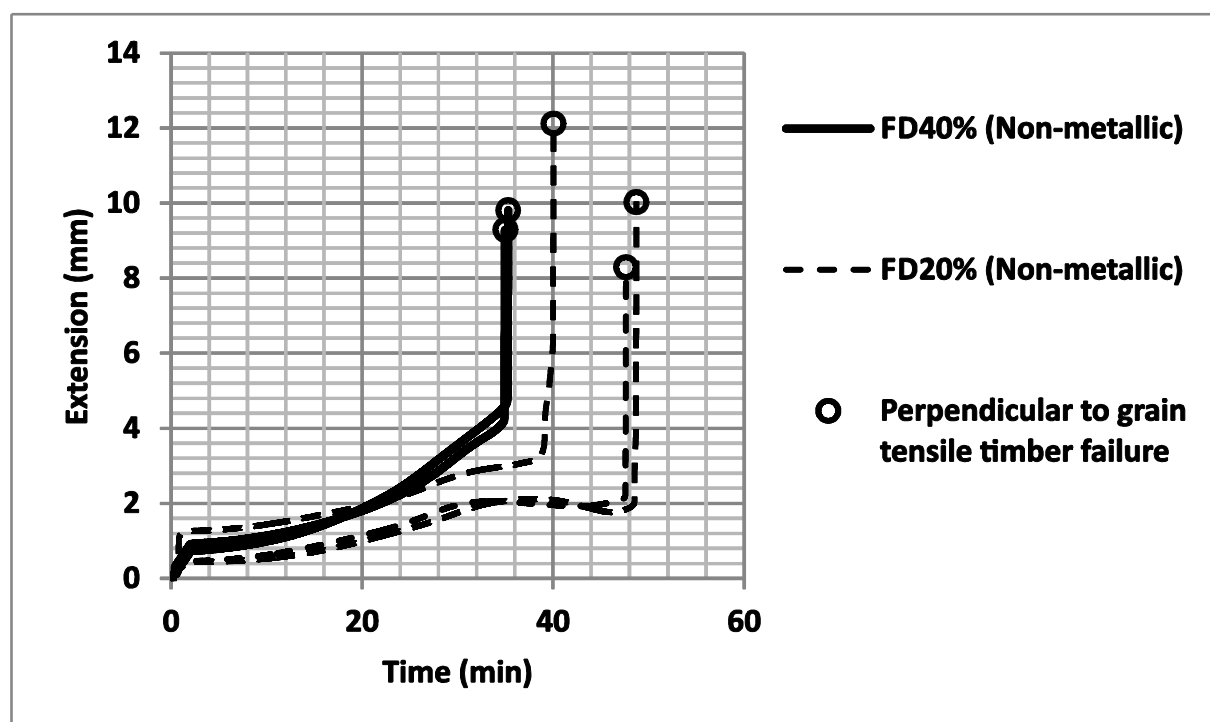


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Figure 12: Specimen of series FA after 50 minutes of heating

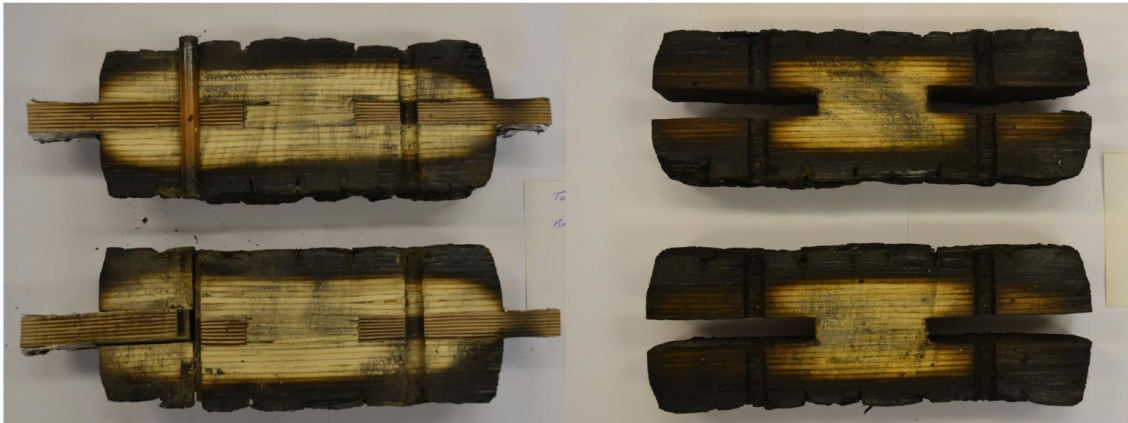


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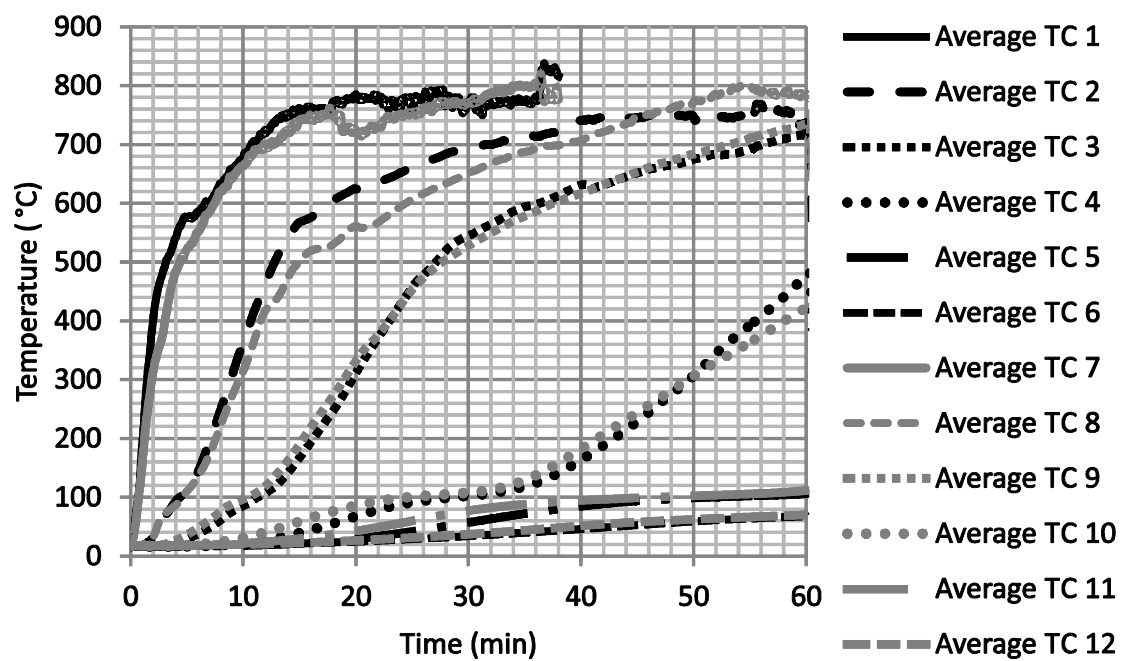


Figure 14: Average temperature results of Test Series CA



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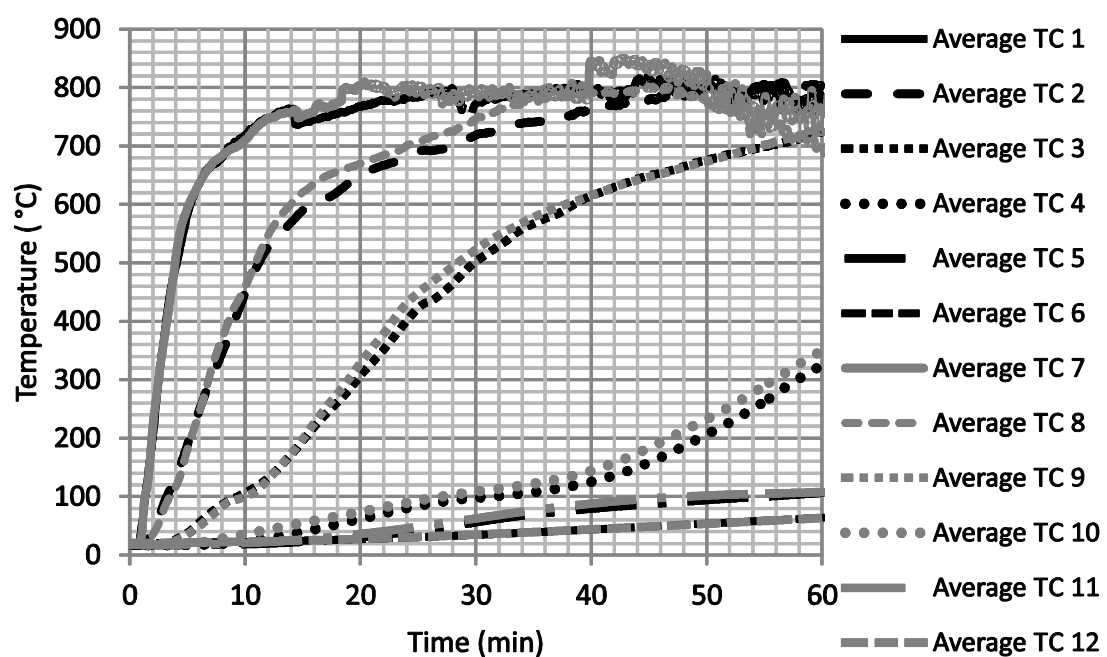


Figure 16: Average temperature results of Test Series CB

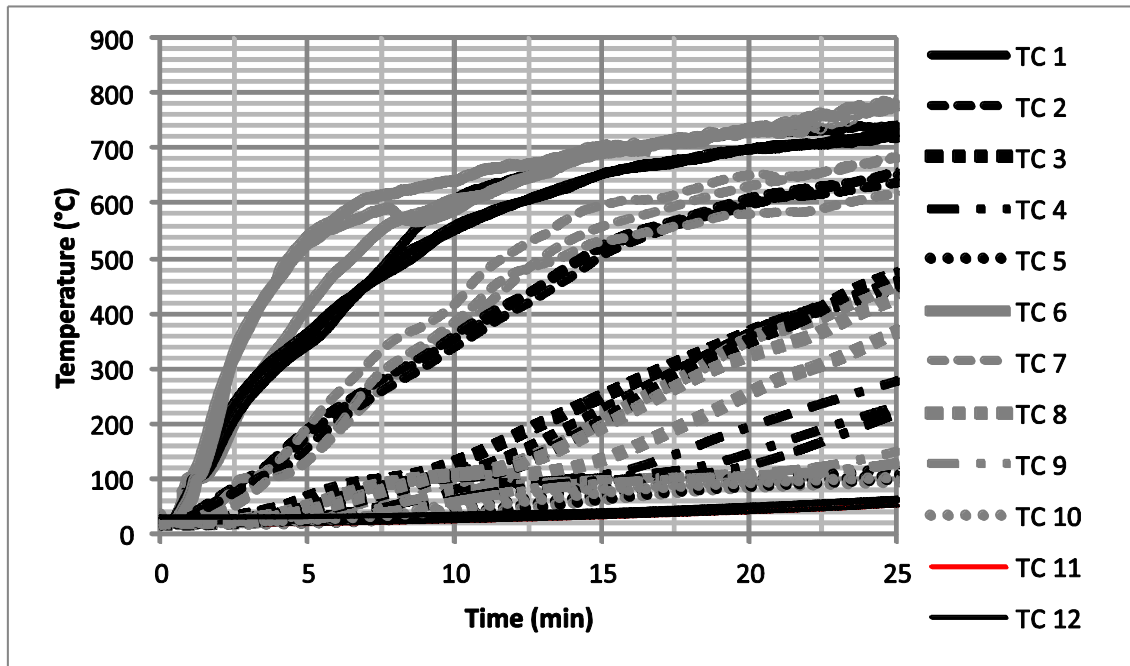


Figure 17: Temperature results of Test Series CC

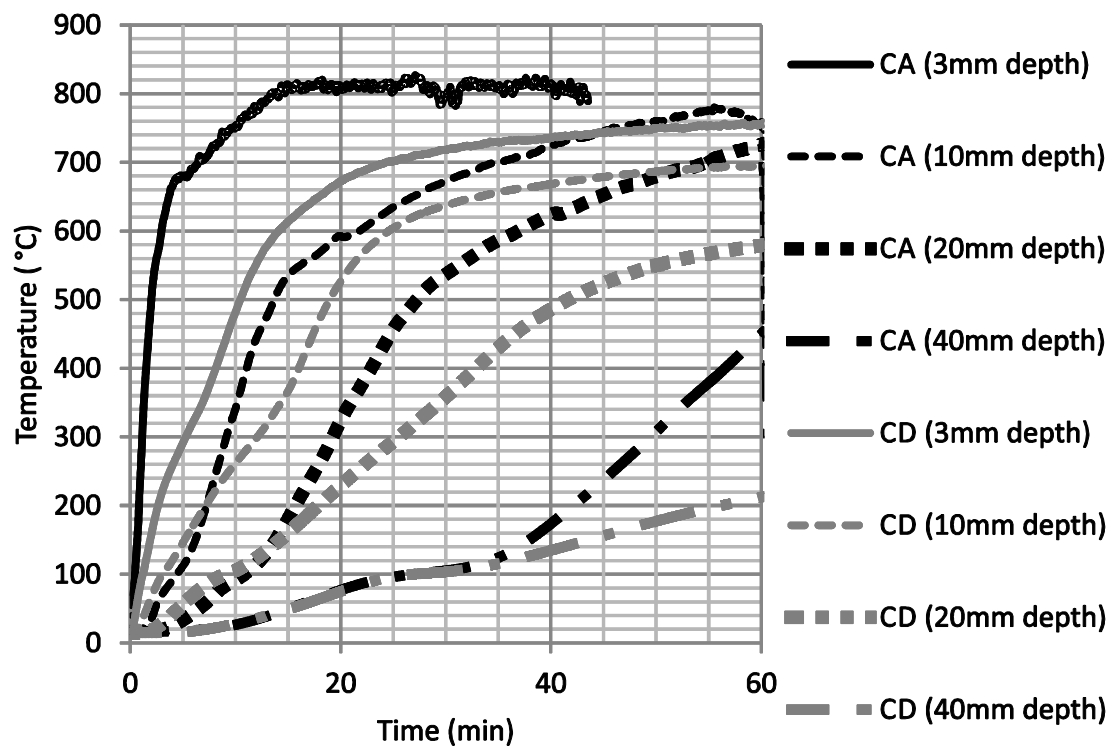


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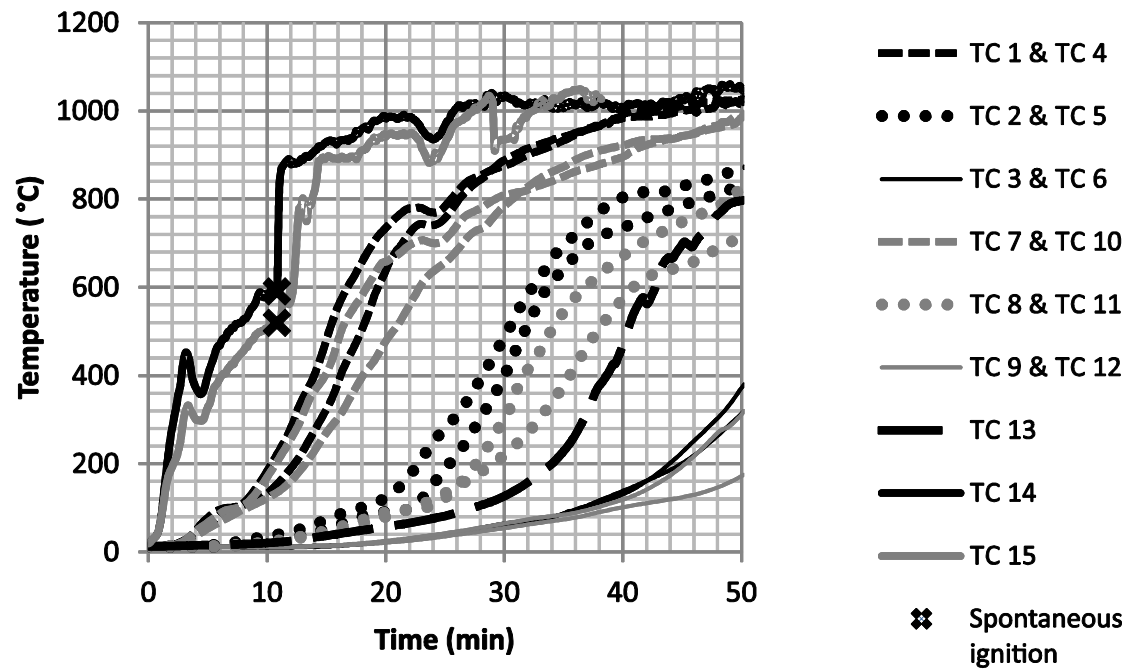


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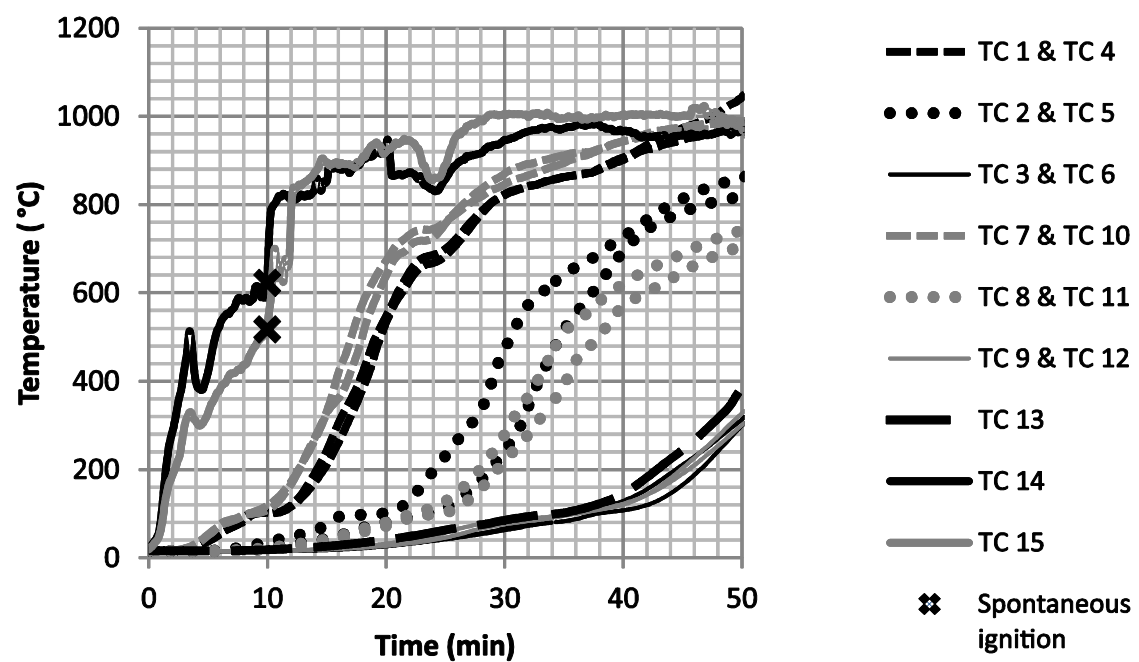


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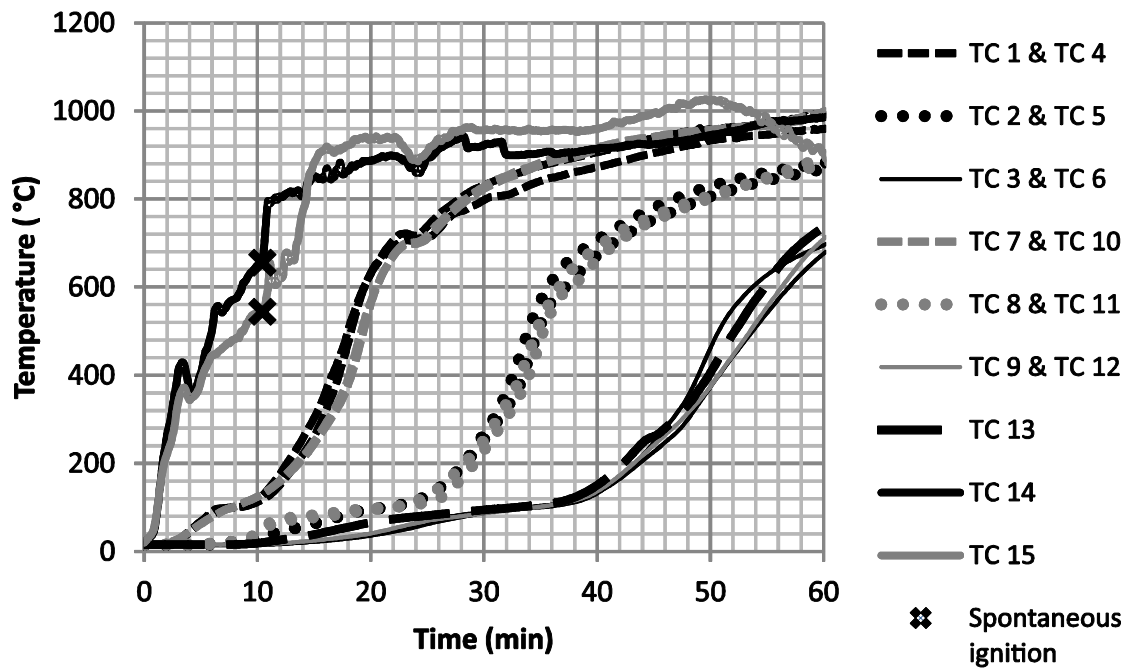


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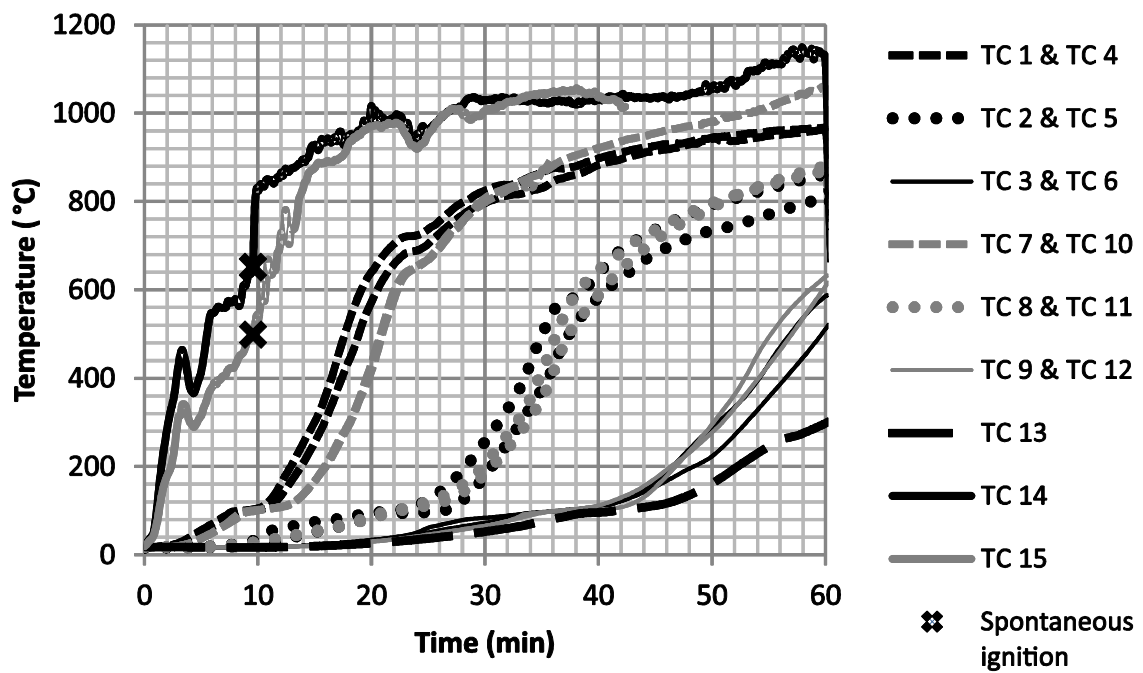


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